Let's play it safe – Children and youths in the digital world
Assessment of the emerging trends and evolutions in ICT services used by children and youths

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Guiding purpose

The guiding purpose of this assessment of emerging trends and evolutions in ICT services used by children and youths is

- to identify evolving challenges, threats and opportunities,

- to draw conclusions and present possible future actions at European level and

- to draft messages to parents and stakeholders in politics and industry, civil society and NGOs.

Research Questions

- What benefits may come out of using new services f. e. online learning tools training the reading skills of small children?

- What harm could result from children's potential confrontation with content, contact or advertisement not appropriate for their age group?

- What risk would involuntary disclosure of private data pose to children and their parents?

- What would that mean for industry, which further strategies and concepts could be applied for children's safety online?

- What would that mean for the role of the parents and their parental skills in guiding their children's Internet usage?
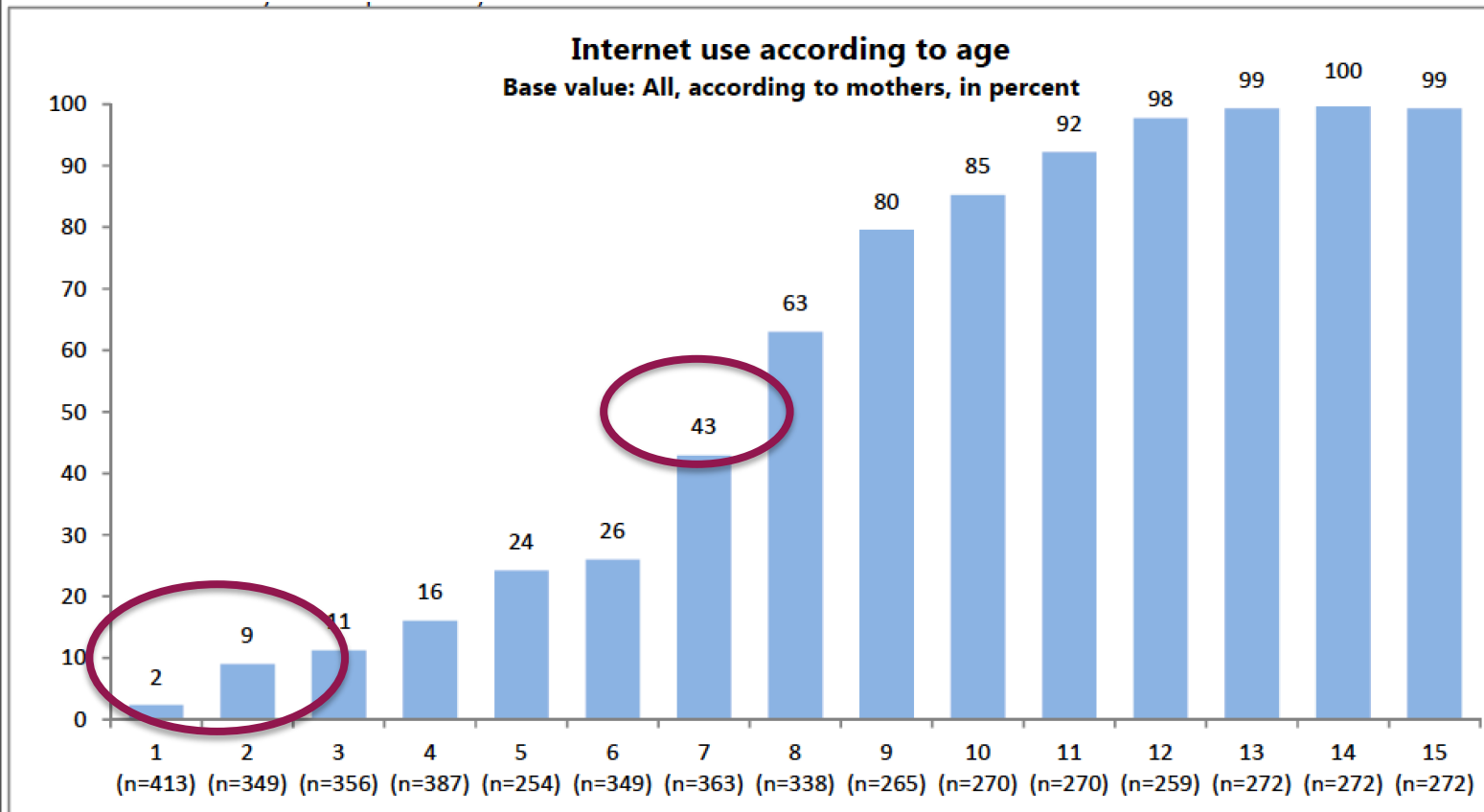
Trends in 2015

- Young children aged 1 to 6 years with no or only basic reading skills using the Internet on a regular basis

- Smart Devices – the Internet of Things

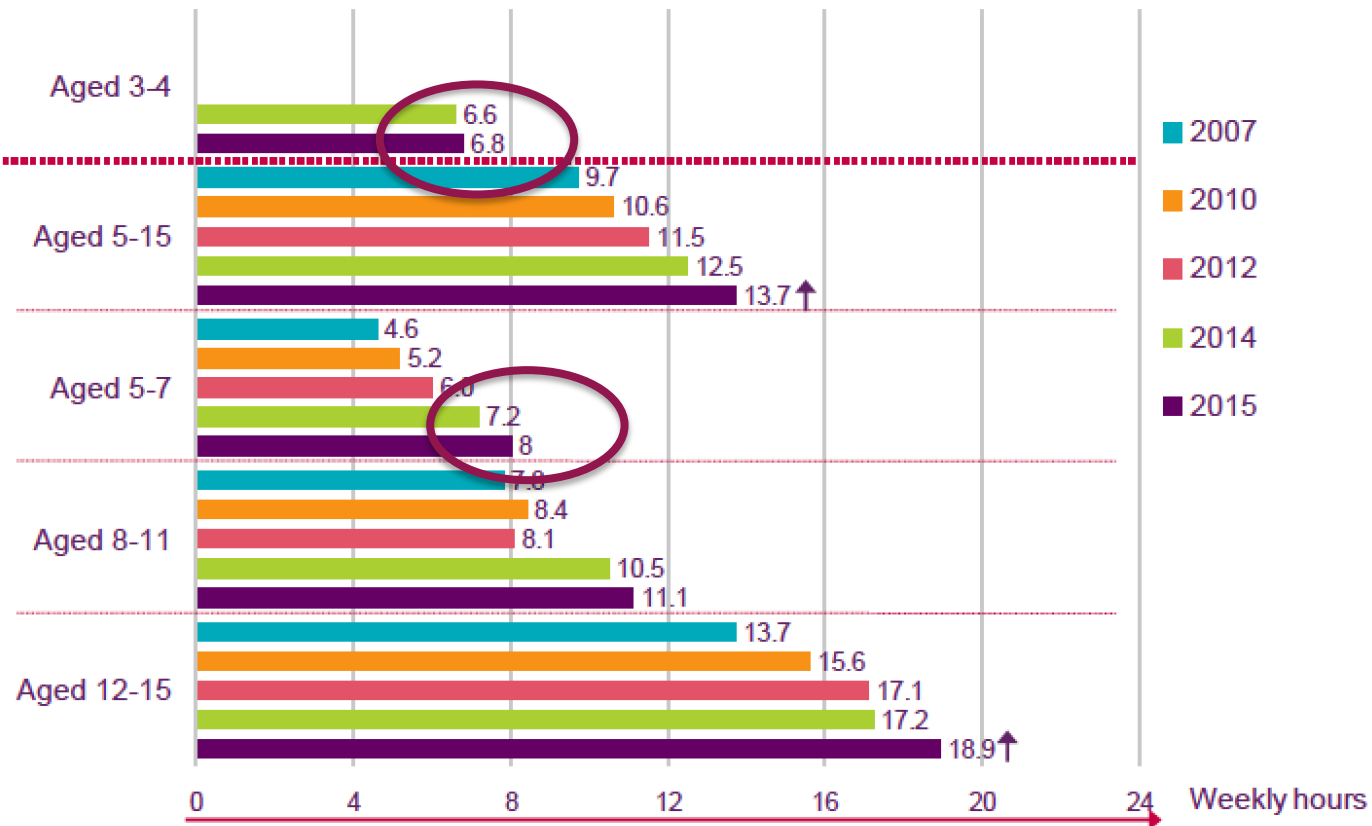- Live Streaming of Audio-Visual Content

Young children aged 1 to 6 years

Young children aged 1 to 6 years

Internet use according to age
Base value: All, according to mothers, in percent

German Youth Institute 2014

Young children aged 1 to 6 years

Figure 34: Estimated weekly hours of internet consumption by age at home (2007, 2010 and 2012) or elsewhere (2014 and 2015)

Aged 3-4
- 6.6
- 6.8

Aged 5-15
- 9.7
- 10.6
- 11.5
- 12.5
- 13.7

Aged 5-7
- 4.6
- 5.2
- 6.0
- 7.2
- 8

Aged 8-11
- 7.0
- 8.4
- 8.1
- 10.5
- 11.1

Aged 12-15
- 13.7
- 15.6
- 17.1
- 17.2
- 18.9

Legend:
- 2007
- 2010
- 2012
- 2014
- 2015

Weekly hours: 0, 4, 8, 12, 16, 20, 24

Children and Parents: Media Use and Attitudes Report 2015, p. 66

Young children aged 1 to 6 years

- Children are going online at an ever younger age with even toddlers less than one year old using the internet on a regular basis.

- Usage of online services on mobile devices with touch screen (smart phones, tablets) is increasing rapidly among the younger age group but has also changed the usage of children who were used to go online with desktop PC and laptop previously.

- Social media platforms addressing smaller children to provide them with a safe area have become popular recently.

Young children aged 1 to 6 years

- Regards content parents of small children are most concerned of violent, scary, or gory content, and strong language; sexual content seams to be less alarming to parents of small children.

- Amount of use, eyestrain and bedtime disruption are also of concern to parents.

- Displacement of other activities and as a consequence too little physical exercise are mentioned as risks to small children rather than dangers of content or contact.

- Platforms addressing smaller children with preselected content raise questions regards the appropriateness of advertisement and sponsored content.

Smart devices – the Internet of Things

http://teddytheguardian.com

Smart devices – the Internet of Things

- Smart TV penetration in family households is growing rapidly (2015: 41 % of children aged 8 – 15 in 2015, *Ofcom;* 42 % of households in Germany, *Bitkom*).

- Preferred content is watched at the time of choice – linear TV watching seems to become outdated for children, a trend that is spurred on by Smart TV, streaming applications and portable devices

- Smart devices targeted directly at children like interactive technical or educational toys, dolls or plush figures become more and more popular among children, although there is a lack of reliable statistical data on usage so far. Often parents and children are not aware that a toy connects to the Internet.

Smart devices – the Internet of Things

- All devices categorised as the IoT or smart devices may have implications for children's safety and privacy as they allow the capturing of data about children's activities and behaviour patterns, e.g. how long and when the device was in use by the child, which is not noticed by either the child or their parents.

- With regard to children's safety and privacy involuntary disclosure of private data is of most concern. It can be posed to children by any device equipped with a microphone, either by a family device like the smart TV or by a device addressed directly to children like a smart toy.

- For younger children the risk of being subject to unwanted advertisement needs to be mentioned.

Live Streaming of Audio-Visual Content

Live Streaming of Audio-Visual Content

- Live streaming is fascinating, not only for young people although there is no evidence for live streaming as a mass phenomenon so far.

- Live streaming has the potential to unleash users creativity and empower them to become producers of content.

- Nonetheless live streaming changes communication habits and bears additional risks due to immediate interaction between the streamers and their audience.

- With live streaming becoming more popular either as a stand alone service or as an embedded functionality in other social media services the differentiation between content and contact related risks dissolves.

Live Streaming of Audio-Visual Content

- Live streaming does pose the risk of commercial sexual exploitation to some children.

- With either screenshots or video-recording "on screen" via special software live streaming imagery can become persistent and distributed widely.

- Posing and modelling images "in the grey area" often taken from live streams are used in the process of grooming, thus threatening not only the child depicted but also other children who are coerced to behave in the same way.

Main Messages to Parents & Policy

- A new concept of 'educational digital literacy' should be considered for parents and other adults in charge of minors. While 9 to 16 year olds become more and more prudent about social media this cannot be expected from younger ones aged up to 6.

- There is a gap of comprehension between the 'What' and the 'Why' among children. Although children have learned their digital literacy lessons, they do not always understand why they should avoid certain types of usage or behave in a certain way when online. Digital literacy education should therefore explain age-appropriately why they should avoid certain types of usage or behave in a certain way when online.

Main Messages to Policy

- Risk-based and future-oriented approaches are necessary in child safety policies and strategies because of fast innovation cycles. The implementation of such approaches and strategies calls for smaller steps instead of just one 100% solution.

- A comprehensive safety concept should built on the assumption that different degrees of vulnerability in different age groups require different strategies of protection.

- The correlation between supervision and resilience needs to be researched further and subsequently addressed appropriately.

Main Messages to Policy & Industry

- In order to synthesise safety measures and programmes there is a need for aligning notions of appropriateness and inappropriateness of content and services to children across countries and across stakeholder groups. Alignment would be beneficial esp. to internationally operating companies.

Main Messages to Industry

- Content classification based on clear and consistent standards needs to be applicable regardless of the platform for providing access to content, including mobile devices, PCs and Smart TVs.

- Product development should follow the concept of Safety by Design and take into account which risks may occur from adding new features and functionalities to a device previously held to be non-harmful.

- Apps and websites targeted at small children should provide an interface for parental control software, easy to handle and working efficiently across operating systems and devices.

- For services that allow immediate interaction between public users to an audience, either reasonable age limits should be set and strictly controlled, or else 'safer areas' for younger users should be provided with 24/7 monitoring and reporting mechanisms.

Thank You for Your Attention!

For further questions and debate
please contact me at jc@i-kiz.de